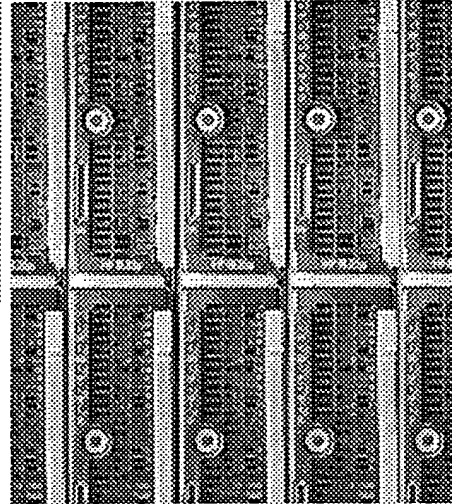
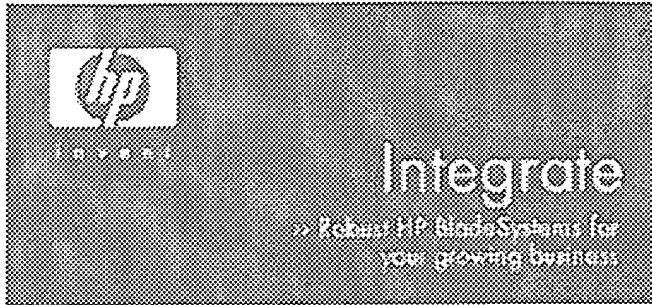


13 July 2005

Select: **United States-English**

» Home &amp; Home C

» Small &amp; Medium

» Large Enterprise

» Government, Hei  
& Education

» Partners &amp; Devel

**Business customers:**

- » Buy direct from HP online  
or call 1-800-898-0262
- » Other ways to buy

- » ProLiant server Smart Buys
- » See more business offers

- » Desktops & Workstations
- » Notebooks & Tablet PCs
- » Handheld Devices
- » Monitors & Projectors
- » Entertainment
- » Music

- » Printing & Multifunction
- » Fax, Copiers & Scanners
- » Digital Photography
- » Software Products
- » Supplies & Accessories

- » Servers
- » Storage
- » Networking
- » Management Software
- » Business & IT Services
- » Solutions

» Online Shoppin

» Support &  
Troubleshootin

» Driver Downloa

» **Contact HP**

- » Company information
- » Jobs at HP

Privacy statement

» **PC Security**

- » Newsroom
- » Offers/Rebates

- » Register your product
- » TV ads

Search: 

» Subscribe

Using this site means you accept its terms

Replacement programs a

© 2005 Hewlett-Packard Development Company, L.P.

United States



» Contact HP

Search: 

## Search results

### » Search all of HP US

- » Start a new search
- » Search another HP country/region website
- » Search help
- » Popular searches

- » Sort by date
- » Show URLs

- » HP Labs : Adv. Studies : CBSR : People : Dick Carter  
The Computational BioScience Research group at HP Labs is focused on developing a technologies through the application of computer science to the hard problems of biology is the advanced research center ...  
2005-06-14
- » HP Labs : People : Bruce Culbertson  
HP Labs : People : Bruce Culbertson Bruce Culbertson Researcher Mobile & Media Systems Vision & Graphics Contact information bruce . culbertson @hp . com Ph: (650)857-6656 852-3791 ...  
2005-06-14
- » HP Labs Research : MMSL : Publications : Vision & Graphics  
Image-based graphics - The Mobile & Media Systems Lab research focus is on mobile, centric appliances and the systems to deliver user-specific rich media services.  
2005-06-16
- » HP Labs : Tech Report: HPL-2001-290: FPGA Implementation of Neighborhood-of-Four Technical reports by HP Labs researchers. HP Labs is the central research lab for Hewlett-Packard.  
2005-06-19
- » HP Labs : Technical Reports : 2001  
HP Labs : Technical Reports : 2001 summary of site-wide JavaScript functionality United English » Contact HP Search: HP Labs All of HP US HP Labs 2001 Technical Reports : »Research » Advanced ...  
2005-06-16

Displaying search results: 1-5

Enter your search words, phrase or question below:

(Example: deskjet 1000cse +manual)

Search: 
[Printable version](#)
[Privacy statement](#)[Using this site means you accept its terms](#)[Feedback to webmaster](#)

© 2005 Hewlett-Packard Development Company, L.P.

United States

[» Contact HP](#)Search: 

## Search results

### » Search all of HP US

- » Start a new search
- » Search another HP country/region website
- » Search help
- » Popular searches

- » Sort by date
- » Show URLs

#### » Slide 1

9/9/2003: Riptide: Fast Protein Identification from Mass Spectrometer Data **Richard J. (**  
Computational BioScience Research, Advanced Studies, HP Labs abstract A biotech fir  
approached HP with its technology ...  
2005-06-17

#### » Teramac

Teramac million-gate defect-tolerant Custom Computer  
2005-06-17

#### » HP Labs : People : Bruce Culbertson

HP Labs : People : Bruce Culbertson Bruce Culbertson Researcher Moblie & Media Sy:  
Vision & Graphics Contact information bruce . culbertson @hp . com Ph: (650)857-6656  
852-3791 ...  
2005-06-14

Displaying search results: 1-3

Enter your search words, phrase or question below:

(Example: deskjet 1000cse +manual)

Search:  [Printable version](#)[Privacy statement](#)[Using this site means you accept its terms](#)[Feedback to webmaster](#)

© 2005 Hewlett-Packard Development Company, L.P.

United States

[» HP Home](#)[» Products & Services](#)[» Support & Drivers](#)[» Solutions](#)[» How to Buy](#)[» Contact HP](#)Search: 

## Search results

### » Search all of HP US

- » Start a new search
- » Search another HP country/region website
- » Search help
- » Popular searches

- » Sort by date
- » Show URLs

No search results were found that match "richard carter".

### Suggestions to improve your search results:

- Check your spelling.
- Try a similar keyword, for example: *notebook* instead of *laptop*.
- Try using more than one keyword.
- See example [search structures](#) and syntax.

### Enter your search words, phrase or question below:

(Example: deskjet 1000cse +manual)

Search: 

### Popular searches:

- |                         |             |                     |
|-------------------------|-------------|---------------------|
| » Drivers and Downloads | » Jetdirect | » HP Pavilion PCs   |
| » Technical support     | » Jornada   | » Plotters          |
| » CD-writer             | » Linux     | » Printers          |
| » Digital cameras       | » Omnibook  | » Scanners          |
| » Jetadmin              | » OpenView  | » Vectra            |
|                         |             | » More popular sear |

[Printable version](#)[Privacy statement](#)[Using this site means you accept its terms](#)[Feedback to webmaster](#)

© 2005 Hewlett-Packard Development Company, L.P.

United States



» Contact HP

Search: richard carter



## Search results

### » Search all of HP US

- » Start a new search
- » Search another HP country/region website
- » Search help
- » Popular searches

- » Sort by date
- » Show URLs

#### » Slide 1

9/9/2003: Riptide: Fast Protein Identification from Mass Spectrometer Data **Richard J. (**  
Computational BioScience Research, Advanced Studies, HP Labs abstract A biotech fir  
approached HP with its technology ...  
2005-06-17

#### » Teramac

Teramac million-gate defect-tolerant Custom Computer  
2005-06-17

#### » HP Labs : People : Bruce Culbertson

HP Labs : People : Bruce Culbertson Bruce Culbertson Researcher Moblie & Media Sy:  
Vision & Graphics Contact information bruce . culbertson @hp . com Ph: (650)857-6656  
852-3791 ...  
2005-06-14

#### » HP Labs : Adv. Studies : CBSR : People : Dick Carter

The Computational BioScience Research group at HP Labs is focused on developing a  
technologies through the application of computer science to the hard problems of biolog  
is the advanced research center ...  
2005-06-14

#### » Microsoft Word - bi\_carter\_r.doc (64.1KB, PDF)

Microsoft Word - bi\_carter\_r.doc ROBERT B. **CARTER** Executive Vice President & Chi  
Information Officer FedEx Corporation Robert B. (Rob) **Carter**, is Executive Vice Presid  
Chief Information Officer at FedEx ...  
2003-11-14

#### » HP Labs : About HP Labs : Executive bios: Richard Zippel

Biography of **Richard Zippel**, director of HP Labs' Cambridge Research Laboratory. HP  
advanced research arm of Hewlett-Packard.  
2005-06-14

#### » view partner information

Bristol International Airport has employed the latest technologies to improve safety on tl  
Mobile computers and a wireless network are being used to capture data about the Bird  
airfield 'hotspots' ...  
2005-07-13

#### » HP Executive Team Bios: Richard H. (Dick) Lampman

Dick Lampman is the Senior Vice President of Research, HP, and Director, HP Labs, th  
company's central research and development organization.  
2005-06-25


#### » HP Labs : Adv. Studies : CBSR : Recent work

The Computational BioScience Research group at HP Labs is focused on developing a  
technologies through the application of computer science to the hard problems of biolog  
is the advanced research center ...  
2005-06-15

» HP Labs : Executive bios: Dick Lampman, Director of HP Labs  
Biography for Richard H. (Dick) Lampman, HP's senior vice president for research and HP Labs. HP Labs conducts advanced research for HP.  
2005-06-14

Displaying search results: 1-10

Enter your search words, phrase or question below:

(Example: deskjet 1000cse +manual)  
Search:  

More than

About PDF files: The PDF files on this Web site can be read online or printed using Adobe® Acroba  
you do not have this software installed on your system, you may download it from [Adobe's Web site](#)

 [Printable version](#)

[Privacy statement](#)

[Using this site means you accept its terms](#)  
© 2005 Hewlett-Packard Development Company, L.P.

[Feedback to webmaste](#)

United States



» Contact HP

Search: 

## Search results

### » Search all of HP US

- » Start a new search
- » Search another HP country/region website
- » Search help
- » Popular searches

- » Sort by date
- » Show URLs

#### » Slide 1

9/9/2003: Riptide: Fast Protein Identification from Mass Spectrometer Data **Richard J. (**  
Computational BioScience Research, Advanced Studies, HP Labs abstract A biotech fir  
approached HP with its technology ...  
2005-06-17

#### » Teramac

Teramac million-gate defect-tolerant Custom Computer  
2005-06-17

#### » HP Labs : People : Bruce Culbertson

HP Labs : People : Bruce Culbertson Bruce Culbertson Researcher Moblie & Media Sy:  
Vision & Graphics Contact information bruce . culbertson @hp . com Ph: (650)857-6656  
852-3791 ...  
2005-06-14

#### » HP Labs : Adv. Studies : CBSR : People : Dick Carter

The Computational BioScience Research group at HP Labs is focused on developing a  
technologies through the application of computer science to the hard problems of biolog  
is the advanced research center ...  
2005-06-14

#### » Microsoft Word - bi\_carter\_r.doc (64.1KB, PDF)

Microsoft Word - bi\_carter\_r.doc ROBERT B. **CARTER** Executive Vice President & Chi  
Information Officer FedEx Corporation Robert B. (Rob) **Carter**, is Executive Vice Presid  
Chief Information Officer at FedEx ...  
2003-11-14

#### » HP Labs : About HP Labs : Executive bios: **Richard Zippel**

Biography of **Richard Zippel**, director of HP Labs' Cambridge Research Laboratory. HP  
advanced research arm of Hewlett-Packard.  
2005-06-14

#### » view partner information

Bristol International Airport has employed the latest technologies to improve safety on tl  
Mobile computers and a wireless network are being used to capture data about the Bird  
airfield 'hotspots' ...  
2005-07-13

#### » HP Executive Team Bios: **Richard H. (Dick) Lampman**

Dick Lampman is the Senior Vice President of Research, HP, and Director, HP Labs, th  
company's central research and development organization.  
2005-06-25

#### » HP Labs : Adv. Studies : CBSR : Recent work

The Computational BioScience Research group at HP Labs is focused on developing a  
technologies through the application of computer science to the hard problems of biolog  
is the advanced research center ...  
2005-06-15

» HP Labs : Executive bios: Dick Lampman, Director of HP Labs  
Biography for Richard H. (Dick) Lampman, HP's senior vice president for research and HP Labs. HP Labs conducts advanced research for HP.  
2005-06-14

Displaying search results: 1-10

Enter your search words, phrase or question below:

(Example: deskjet 1000cse +manual)

Search:



More than

About PDF files: The PDF files on this Web site can be read online or printed using Adobe® Acroba  
you do not have this software installed on your system, you may download it from [Adobe's Web site](#)

 [Printable version](#)

[Privacy statement](#)

[Using this site means you accept its terms](#)

[Feedback to webmaste](#)

© 2005 Hewlett-Packard Development Company, L.P.



United States

» HP Home

» Products &amp; Services

» Support &amp; Drivers

» Solutions

» How to Buy

» Contact HP

Search: 

## Search results

### » Search all of HP US

- » Start a new search
- » Search another HP country/region website
- » Search help
- » Popular searches

- » Sort by date
- » Show URLs

#### » HP Labs : Adv. Studies : CBSR : People : Dick Carter

The Computational BioScience Research group at HP Labs is focused on developing a technologies through the application of computer science to the hard problems of biology is the advanced research center ...  
2005-06-14

#### » Microsoft Word - bi\_carter\_r.doc (64.1KB, PDF)

Microsoft Word - bi\_carter\_r.doc ROBERT B. CARTER Executive Vice President & Chief Information Officer FedEx Corporation Robert B. (Rob) Carter, is Executive Vice President Chief Information Officer at FedEx ...  
2003-11-14

#### » Teramac

Teramac million-gate defect-tolerant Custom Computer  
2005-06-17

#### » HP Labs : Adv. Studies : CBSR : Recent work

The Computational BioScience Research group at HP Labs is focused on developing a technologies through the application of computer science to the hard problems of biology is the advanced research center ...  
2005-06-15

#### » HP Labs : People : Bruce Culbertson

HP Labs : People : Bruce Culbertson Bruce Culbertson Researcher Mobile & Media Systems Vision & Graphics Contact information bruce . culbertson @hp . com Ph: (650)857-6656 852-3791 ...  
2005-06-14

#### » Full transcript HP Network Services Solutions

HP Network Infrastructure Transcript  
2005-07-08

#### » HP OpenCall - Mobility management and service platforms deliver more through standards

HP OpenCall's Position Determination Entity (PDE) is the leading CDMA (Code-Division Access) based A-GPS (assisted Global Positioning System) based PDE currently on the market today. A-GPS supplements and ...  
2005-06-21

#### » HP OpenCall - Intelligent Network Server

HP OpenCall Intelligent Network Server enables the quick development, testing and off-line deployment of wireline, wireless and next-generation services that require extreme level of flexibility, scalability ...  
2005-06-21

#### » HP Labs Research : MMSL : Publications : Vision & Graphics

Image-based graphics - The Mobile & Media Systems Lab research focus is on mobile, handheld appliances and the systems to deliver user-specific rich media services.  
2005-06-16

» HP OpenCall - Service profile

An overview of the HP OpenCall software suite; its main features, benefits, different pro families and their respective platforms.

2005-06-23

Displaying search results: 1-10

Enter your search words, phrase or question below:

(Example: deskjet 1000cse +manual)

Search:



About PDF files: The PDF files on this Web site can be read online or printed using Adobe® Acrobat. If you do not have this software installed on your system, you may download it from [Adobe's Web site](#)

 [Printable version](#)

[Privacy statement](#)

[Using this site means you accept its terms](#)

[Feedback to webmaster](#)

© 2005 Hewlett-Packard Development Company, L.P.


[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

 Search: ☒ The ACM Digital Library ☐ The Guide

+"~genetic ~algorithm" +~fitness +~evolution +~graphic +~



THE ACM DIGITAL LIBRARY


[Feedback](#) [Report a problem](#) [Satisfaction survey](#)

 Terms used ~genetic

Found 41 of 157,873

~algorithm ~fitness ~evolution ~graphic ~interface

Sort results by

relevance


[Save results to a Binder](#)

 Try an [Advanced Search](#)

Display results

expanded form


[Search Tips](#)

 Try this search in [The ACM Guide](#)
☐ Open results in a new window

Results 41 - 41 of 41

 Result page: [previous](#) [1](#) [2](#) [3](#)

 Relevance scale ☐ ☐ ☐ ☐ ☐

#### 41 [Technology to enable learning I: Teaching critical thinking skills in IT using PINE-TRIZ](#)



Ron Fulbright

 October 2004 **Proceedings of the 5th conference on Information technology education**

 Full text available: pdf (192.65 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

TRIZ is a structured approach stimulating innovative problem solving. Corporations use TRIZ to strengthen employees' critical thinking skills. This paper describes an ongoing effort at the University of South Carolina Upstate to use an extension of TRIZ, called PINE-TRIZ, to develop alternative, and analytical thinking skills in non-traditional information technology students. TRIZ principles are better suited for physical, chemical, and mechanical systems. PINE-TRIZ builds on TRIZ by adding ...

**Keywords:** IT curriculum design, analytical thinking, critical thinking skills, lateral thinking, logical thinking

Results 41 - 41 of 41

 Result page: [previous](#) [1](#) [2](#) [3](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2005 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:


[Adobe Acrobat](#)

[QuickTime](#)

[Windows Media Player](#)

[Real Player](#)


[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

 Search: ☒ The ACM Digital Library ☐ The Guide

+"~genetic ~algorithm" +~fitness +~evolution +~graphic +~

THE ACM DIGITAL LIBRARY


[Feedback](#) [Report a problem](#) [Satisfaction survey](#)

 Terms used ~genetic

Found 41 of 157,873

~algorithm ~fitness ~evolution ~graphic ~interface

Sort results by

relevance

Display results

expanded form


[Save results to a Binder](#)

[Search Tips](#)
☐ Open results in a new window

 Try an [Advanced Search](#)

 Try this search in [The ACM Guide](#)

Results 21 - 40 of 41

 Result page: [previous](#) [1](#) [2](#) [3](#)

 Relevance scale ☐ ☐ ☐ ☐ ☐

## 21 [Applications: An evolutionary optimization approach for 3D human head model classification](#)

Hau-San Wong, Kent K. T. Cheung, Horace H. S. Ip

 November 2003 **Proceedings of the 5th ACM SIGMM international workshop on Multimedia information retrieval**

 Full text available: pdf(677.93 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Classification of 3-D head models based on their shape attributes for subsequent indexing and retrieval are important in many applications, as in the selection and generation of human characters in virtual scenes, and the composition of morphing sequences requiring a qualitatively similar target head model. Simple feature representations are more efficient but may not be adequate for distinguishing the subtly different head model classes. In view of these, we propose an optimization approach bas ...

**Keywords:** 3D head model, evolutionary computation, genetic algorithm, multiple classifier system, pattern classification

## 22 [Manufacturing applications: Simulation optimization in manufacturing analysis: simulation based optimization for supply chain configuration design](#)

Tu Hoang Truong, Farhad Azadivar

 December 2003 **Proceedings of the 35th conference on Winter simulation: driving innovation**

 Full text available: pdf(646.63 KB) Additional Information: [full citation](#), [abstract](#), [references](#)

The design of a supply chain network as an integrated system with several tiers of suppliers is a difficult task. It consists of making strategic decisions on the facility location, stocking location, production policy, production capacity, distribution and transportation modes. This research develops a hybrid optimization approach to address the Supply Chain Configuration Design problem. The new approach combines simulation, mixed integer programming and genetic algorithm. The genetic algo ...

## 23 [Real world applications: Interactive estimation of agent-based financial markets models: modularity and learning](#)

Ihsan Ecemis, Eric Bonabeau, Trent Ashburn

 June 2005 **Proceedings of the 2005 conference on Genetic and evolutionary computation GECCO '05**

Full text available:  pdf(435.60 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Building upon the interactive inversion method introduced by Ashburn and Bonabeau (2004), we show how to dramatically improve the results by exploiting modularity and by letting the computer learn user preferences.

**Keywords:** agent-based modeling, interactive evolution

## 24 Distributed systems and grid computing (DSGC): Dynamic scheduling of scientific workflow applications on the grid: a case study

Radu Prodan, Thomas Fahringer

March 2005 **Proceedings of the 2005 ACM symposium on Applied computing**

Full text available:  pdf(865.39 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The existing Grid workflow scheduling projects do not handle recursive loops which are characteristic to many scientific problems. We propose a hybrid approach for scheduling Directed Graph (DG)-based workflows in a Grid environment with dynamically changing computational and network resources. Our dynamic scheduling algorithm is based on the iterative invocation of classical static Directed Acyclic Graphs (DAGs) scheduling heuristics generated using well-defined cycle elimination and task migra ...

**Keywords:** genetic algorithms, grid computing, optimisation, performance steering, scheduling, scientific workflows

## 25 Incorporating imprecise computation into system-level design of application-specific heterogeneous multiprocessors

Yosef G. Tirat-Gefen, Diogenes C. Silva, Alice C. Parker

June 1997 **Proceedings of the 34th annual conference on Design automation - Volume 00**

Full text available:  pdf(324.76 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)


 Publisher Site

This paper introduces a basic mixedinteger-linear model (MILP) to design application-specific heterogeneous multiprocessors (ASHM) allowing imprecise computation of tasks executed in a non-preemptive mode. The proposed model was used in the development of a genetic algorithm integrated into the tool set MEGA that uses soft computing techniques for design of optimal/near-optimal ASHMs subject to constraints on performance, cost and output-data quality.

## 26 Simulation optimization: methods and applications

Yolanda Carson, Anu Maria

December 1997 **Proceedings of the 29th conference on Winter simulation**

Full text available:  pdf(1.04 MB)

Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

## 27 Future of simulation: Panel: future of simulation: panel session: the future of simulation

Jerry Banks

December 2001 **Proceedings of the 33rd conference on Winter simulation**

Full text available:  pdf(271.72 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)


Panelists representing seven areas of application give their views on the future of simulation. There is some consistency, but not a lot. Optimization, the web, training, supply chain management, graphics, and real time simulation received two mentions each.

However, depending on how the counting is performed, there are another six areas with a single mention.

28 Posters and Short Papers: The evolutionary sound synthesis method

Jônatas Manzolli, Adolfo Maia, Jose Fornari, Furio Damiani

October 2001 **Proceedings of the ninth ACM international conference on Multimedia**

Full text available:  pdf(2.02 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

A mathematical model for interactive sound synthesis based on the application of Genetic Algorithms (GA) is presented. The Evolutionary Sound Synthesis Method (ESSynth) generates sequences of waveform variants by the application of genetic operators on an initial population of waveforms. We describe how the waveforms can be treated as genetic code, the fitness evaluation methodology and how genetic operations such as crossover and mutation are used to produce generations of waveforms. Finally, w ...

29 General applications and methodology: General methodology 3: global search strategies for simulation optimisation

George D. Magoulas, Tillal Eldabi, Ray J. Paul

December 2002 **Proceedings of the 34th conference on Winter simulation: exploring new frontiers**

Full text available:  pdf(236.39 KB)

Additional Information: [full citation](#), [abstract](#), [references](#)

Simulation optimization is rapidly becoming a mainstream tool for simulation practitioners, as several simulation packages include add-on optimization tools. In this paper we are concentrating on an automated optimization approach that is based on adapting model parameters in order to handle uncertainty that arises from stochastic elements of the process under study. We particularly investigate the use of global search methods in this context, as these methods allow the optimization strategy ...

30 Parallel and distributed systems and networking: DEVOpT: a distributed architecture supporting heuristic and metaheuristic optimization methods

Eder N. Mathias, Celso M. da Costa, Fernando L. Dotti, Felipe M. Müller

March 2002 **Proceedings of the 2002 ACM symposium on Applied computing**

Full text available:  pdf(834.81 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This paper presents a distributed software architecture that allows the cooperation among research institutions in the field of Combinatorial Optimization --- *DEVOpT*: Distributed Evolutionary Optimization Centers. It has as main aims to share existing algorithms for optimization problems, to allow the easy testing of these algorithms with existing instances, to provide fast and better ways to design new algorithms, and to share computational power among the cooperating institutions. This ...

**Keywords:** distributed environment, heuristics and metaheuristics, master-slave approach, optimization algorithms

31 Hybrid search algorithms

Roy P. Pargas, Jennifer Ludwick, Steven Spoon

April 1997 **Proceedings of the 1997 ACM symposium on Applied computing**


Full text available:  pdf(443.96 KB)

Additional Information: [full citation](#), [references](#), [index terms](#)

**Keywords:** dynamical systems, optimization, parallel processing

**32 Motion patterns: Layered dynamic control for interactive character swimming**

Po-Feng Yang, Joe Laszlo, Karan Singh

August 2004 **Proceedings of the 2004 ACM SIGGRAPH/Eurographics symposium on Computer animation**Full text available:  pdf(1.71 MB)Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This paper proposes a layered strategy for controlling character motion in a dynamically varying environment. We illustrate this approach in the context of a physically simulated human swimmer. The swimmer attempts to follow a dynamic target by augmenting cyclic stroke control with a set of pre-specified variations, based on the current state of the character and its environment. Control of a given swim stroke is decomposed into three layers: a basic stroke sequence, a set of per-stroke contr ...

**33 Software/modelware tutorials I: eM-Plant: eliminate bottlenecks with integrated analysis tools in eM-Plant**

Matthias U. Heinicke, Alan Hickman

December 2000 **Proceedings of the 32nd conference on Winter simulation**Full text available:  pdf(243.24 KB)Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)

To build a realistic simulation model is all very well - to add real value you must identify the major difficulties and generate better alternatives. Tecnomatix Technologies, developers of eM-Plant, the object oriented simulation tool for discrete event simulation, planning and optimization of production and logistics, are the world leaders of the e-Manufacturing market. eM-Plant is used across many industries from manufacturers like BMW and Daimler-Chrysler through shipyards to international fi ...

**34 Book reviews**

Karen T. Sutherland

March 2001 **intelligence**, Volume 12 Issue 1Full text available:  pdf(88.41 KB)  html(34.55 KB)Additional Information: [full citation](#), [references](#), [index terms](#)**35 Organizational engineering (OE): Applying scheduling techniques to minimize the number of late jobs in workflow systems**

Gregório Baggio, Jacques Wainer, Clarence Ellis

March 2004 **Proceedings of the 2004 ACM symposium on Applied computing**Full text available:  pdf(268.62 KB)Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Ordering the cases in a workflow can result in significant decrease on the number of late jobs. But merging workflow and scheduling is not trivial. This paper presents some of the problems of using scheduling results in ordering cases in a workflow and tackles two of them: the uncertainties on the cases' processing times and routing. A new approach to modeling these uncertainties is also proposed: the guess and solve technique. It consists of making a guess on the execution times and routes the ...

**Keywords:** scheduling, simulation, workflow**36 A flexible image search engine**

Panrit Tosukhowong, Frederic Andres, Kinji Ono, Nicolas Dessaigne, José Martinez, Nouredine Mouaddib, Douglas C. Schmidt

October 1999 **Proceedings of the seventh ACM international conference on Multimedia (Part 2)**

Full text available:  [pdf\(581.93 KB\)](#) Additional Information: [full citation](#), [references](#), [index terms](#)

**Keywords:** MediaSys, fuzzy logic, image search engine, retrieval by content

37 Applications of machine learning and rule induction

Pat Langley, Herbert A. Simon

November 1995 **Communications of the ACM**, Volume 38 Issue 11

Full text available:  [pdf\(554.28 KB\)](#)


Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

Machine learning is the study of computational methods for improving performance by mechanizing the acquisition of knowledge from experience. Expert performance requires much domain-specific knowledge, and knowledge engineering has produced hundreds of AI expert systems that are now used regularly in industry. Machine learning aims to provide increasing levels of automation in the knowledge engineering process, replacing much time-consuming human activity with automatic tec ...

38 Face recognition: A literature survey

W. Zhao, R. Chellappa, P. J. Phillips, A. Rosenfeld

December 2003 **ACM Computing Surveys (CSUR)**, Volume 35 Issue 4

Full text available:  [pdf\(4.28 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

As one of the most successful applications of image analysis and understanding, face recognition has recently received significant attention, especially during the past several years. At least two reasons account for this trend: the first is the wide range of commercial and law enforcement applications, and the second is the availability of feasible technologies after 30 years of research. Even though current machine recognition systems have reached a certain level of maturity, their success is ...

**Keywords:** Face recognition, person identification

39 Computer applications in health care (CAHC): Automatic fitting of cochlear implants with evolutionary algorithms

C. Bourgeois-République, J. J. Chabrier, P. Collet

March 2004 **Proceedings of the 2004 ACM symposium on Applied computing**

Full text available:  [pdf\(460.24 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This paper presents an optimisation algorithm designed to perform *in-situ* automatic fitting of cochlear implants. All patients are different, which means that cochlear parametrisation is a difficult and long task, with results ranging from perfect blind speech recognition to patients who cannot make anything out of their implant and just turn it off. The proposed method combines evolutionary algorithms and medical expertise to achieve autonomous interactive fitting through a Personal Digita ...

**Keywords:** cochlear implants, interactive evolutionary optimization

40 KEYNOTE SPEECH: Interaction, imagination and immersion some research needs

Thomas B. Sheridan

October 2000 **Proceedings of the ACM symposium on Virtual reality software and technology**



Full text available:  pdf(819.54 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)

This paper discusses four ways that humans interact with their environments, plus four variables that determine the experience of virtual reality, and also which of the interactions support which of the VR-enhancing variables. Some philosophical issues about immersion, the experience of presence, and the meaning of reality are then considered. The engineering paradigm of estimation is then reviewed as a way of bridging classical ontological differences of opinion about reality. Finally some VR res ...

**Keywords:** Human, applications, definition, education, haptics, imagination, immersion, interaction, ontology, presence, reality, spirituality, surgery, vehicles, virtual

Results 21 - 40 of 41

Result page: [previous](#) [1](#) [2](#) [3](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2005 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)


[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

 Search: ☒ The ACM Digital Library ☐ The Guide

+"~genetic ~algorithm" +~fitness +~evolution +~graphic +~



THE ACM DIGITAL LIBRARY


[Feedback](#) [Report a problem](#) [Satisfaction survey](#)

 Terms used ~genetic

Found 41 of 157,873

~algorithm ~fitness ~evolution ~graphic ~interface

Sort results by

relevance


[Save results to a Binder](#)

 Try an [Advanced Search](#)

 Try this search in [The ACM Guide](#)

Display results

expanded form


[Search Tips](#)
☐ Open results in a new window

Results 1 - 20 of 41

 Result page: [1](#) [2](#) [3](#) [next](#)

 Relevance scale ☐ ☐ ☐ ☐ ☐


# 1 [Artificial evolution for computer graphics](#)

Karl Sims

 July 1991 **ACM SIGGRAPH Computer Graphics , Proceedings of the 18th annual conference on Computer graphics and interactive techniques**, Volume 25 Issue 4

 Full text available: [pdf\(8.74 MB\)](#)

 Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper describes how evolutionary techniques of variation and selection can be used to create complex simulated structures, textures, and motions for use in computer graphics and animation. Interactive selection, based on visual perception of procedurally generated results, allows the user to direct simulated evolutions in preferred directions. Several examples using these methods have been implemented and are described. 3D plant structures are grown using fixed sets of genetic parameters. I ...



# 2 [Evolving virtual creatures](#)

Karl Sims

 July 1994 **Proceedings of the 21st annual conference on Computer graphics and interactive techniques**

 Full text available: [pdf\(84.65 KB\)](#) [ps\(219.40 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper describes a novel system for creating virtual creatures that move and behave in simulated three-dimensional physical worlds. The morphologies of creatures and the neural systems for controlling their muscle forces are both generated automatically using genetic algorithms. Different fitness evaluation functions are used to direct simulated evolutions towards specific behaviors such as swimming, walking, jumping, and following. A genetic language is presented that uses no ...



# 3 [Generation of transfer functions with stochastic search techniques](#)

Taosong He, Lichan Hong, Arie Kaufman, Hanspeter Pfister

 October 1996 **Proceedings of the 7th conference on Visualization '96**

 Full text available: [pdf\(1.14 MB\)](#) [Publisher Site](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

# 4 [Reconstructing occlusal surfaces of teeth using a genetic algorithm with simulated](#)

annealing type selection

Vladimir Savchenko, Lothar Schmitt

May 2001 **Proceedings of the sixth ACM symposium on Solid modeling and applications**Full text available:  pdf(708.02 KB)Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In this paper, we present an application of numerical optimization for surface reconstruction (more precisely: reconstruction of missing parts of a real geometric object represented by volume data) by employing a specially designed genetic algorithm to solve a problem concerning computer-aided design in dentistry. Using a space mapping technique the surface of a given model tooth is fitted by a shape transformation to extrapolate (or reconstruct) the remaining surface of a patient's tooth with ...

**Keywords:** computer-aided restoration design, constructive solid geometry, genetic algorithm, simulated annealing, space mapping, surface reconstruction, volume modeling

5 Metaheuristics in combinatorial optimization: Overview and conceptual comparison

Christian Blum, Andrea Roli

September 2003 **ACM Computing Surveys (CSUR)**, Volume 35 Issue 3Full text available:  pdf(431.84 KB)Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The field of metaheuristics for the application to combinatorial optimization problems is a rapidly growing field of research. This is due to the importance of combinatorial optimization problems for the scientific as well as the industrial world. We give a survey of the nowadays most important metaheuristics from a conceptual point of view. We outline the different components and concepts that are used in the different metaheuristics in order to analyze their similarities and differences. Two v ...

**Keywords:** Metaheuristics, combinatorial optimization, diversification., intensification

6 Automatic aircraft conflict resolution using genetic algorithms

Nicolas Durand, Jean-Marc Alliot, Joseph Noailles

February 1996 **Proceedings of the 1996 ACM symposium on Applied Computing**Full text available:  pdf(919.64 KB)Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

**Keywords:** air traffic control, conflict resolution, genetic algorithms

7 Real world applications: The molecule evaluator: an interactive evolutionary algorithm for designing drug molecules

Eric-Wubbo Lameijer, Ad IJzerman, Joost Kok

June 2005 **Proceedings of the 2005 conference on Genetic and evolutionary computation GECCO '05**Full text available:  pdf(317.94 KB)Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

To help chemists design new drugs, we created a tool that uses interactive evolution to design drug molecules, the "Molecule Evaluator". In contrast to most other evolutionary de novo design programs, the molecule representation and the set of mutations enable it to both search the chemical space of all drug like molecules extensively and to fine-tune molecular structures to the problem at hand. Additionally, we use interaction with the user as a fitness function, which is new in evolutionary al ...

**Keywords:** drug design, interactive evolution, molecule

8 Genetic algorithms: Terrain generation using genetic algorithms

Teong Joo Ong, Ryan Saunders, John Keyser, John J. Leggett

June 2005 **Proceedings of the 2005 conference on Genetic and evolutionary computation GECCO '05**

Full text available:  [pdf\(396.15 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)


We propose a method for applying genetic algorithms to create 3D terrain data sets. Existing procedural algorithms for generation of terrain have several shortcomings. The most popular approach, fractal-based terrain generation, is efficient, but is difficult for a user to control. Other methods tend to require too much user input. In this paper, we provide an alternative method of terrain generation that uses a two-pass genetic algorithm approach to produce a variety of terrain types using only ...

**Keywords:** genetic algorithms, geographic information systems (GIS), height field, image processing, terrain generation

9 JavaGenes and Condor: cycle-scavenging genetic algorithms

Al Globus, Eric Langhirt, Miron Livny, Ravishankar Ramamurthy, Marvin Solomon, Steve Traugott

June 2000 **Proceedings of the ACM 2000 conference on Java Grande**

Full text available:  [pdf\(603.01 KB\)](#) Additional Information: [full citation](#), [references](#), [index terms](#)

**Keywords:** Condor, Java, genetic algorithms

10 The use of dynamic contexts to improve casual internet searching

Gondy Leroy, Ann M. Lally, Hsinchun Chen

July 2003 **ACM Transactions on Information Systems (TOIS)**, Volume 21 Issue 3

Full text available:  [pdf\(231.61 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Research has shown that most users' online information searches are suboptimal. Query optimization based on a relevance feedback or genetic algorithm using dynamic query contexts can help casual users search the Internet. These algorithms can draw on implicit user feedback based on the surrounding links and text in a search engine result set to expand user queries with a variable number of keywords in two manners. Positive expansion adds terms to a user's keywords with a Boolean "and," negative ...

**Keywords:** Information retrieval, Internet, automatic query expansion, genetic algorithm, implicit user feedback, personalization, relevance feedback

11 The use of genetic algorithms and neural networks to investigate the Baldwin effect

Michael Jones, Aaron Konstam

February 1999 **Proceedings of the 1999 ACM symposium on Applied computing**

Full text available:  [pdf\(455.88 KB\)](#) Additional Information: [full citation](#), [references](#), [index terms](#)

**Keywords:** Baldwin effect, genetic algorithms, learning, neural networks

12 Construction engineering and project management: CEPM 1: selecting earthmoving equipment fleets using genetic algorithms

Mohamed Marzouk, Osama Moselhi

December 2002 **Proceedings of the 34th conference on Winter simulation: exploring new frontiers**

Full text available:  [pdf\(303.43 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

This paper presents an application of simulation optimization in construction utilizing genetic algorithms. The paper focuses on the use of genetic algorithms (GAs) as a tool for optimizing the total cost of earthmoving operations accounting for available equipment models to contractors and their corresponding quantities. The developed genetic algorithm has a powerful computational utility that increases its efficiency. The fitness of generated chromosomes is calculated utilizing a simulation ...

13 Book reviews

December 1999 **intelligence**, Volume 10 Issue 4

Full text available:  [pdf\(385.82 KB\)](#) Additional Information: [full citation](#), [references](#), [index terms](#)  
 [html\(66.61 KB\)](#)

14 Introduction & overview of "artificial life"—evolving intelligent agents for modeling & simulation

A. Martin Wildberger

November 1996 **Proceedings of the 28th conference on Winter simulation**

Full text available:  [pdf\(987.66 KB\)](#) Additional Information: [full citation](#), [references](#)

15 Evolving intelligent text-based agents

Edmund S. Yu, Ping C. Koo, Elizabeth D. Liddy

June 2000 **Proceedings of the fourth international conference on Autonomous agents**


Full text available:  [pdf\(1.14 MB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

**Keywords:** evolution of agents, information agents, learning and adaptation, multi-agent teams

16 Tournament selection for browsing temporal signals

Ik Soo Lim, Daniel Thalmann

March 2000 **Proceedings of the 2000 ACM symposium on Applied computing - Volume 2**

Full text available:  [pdf\(320.87 KB\)](#) Additional Information: [full citation](#), [references](#), [index terms](#)

**Keywords:** audio, browsing, multimedia, retrieval, tournament, user interface, video

17 Enhancing information retrieval by automatic acquisition of textual relations using genetic programming

Agneta Bergström, Patricija Jaksetic, Peter Nordin

January 2000 **Proceedings of the 5th international conference on Intelligent user**

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2005 ACM, Inc.  
[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)



Creation date: 08-01-2005  
Indexing Officer: HLE18 - HOA LE  
Team: OIPEBackFileIndexing  
Dossier: 09988598

Legal Date: 07-12-2005

No.	Doccode	Number of pages
1	SRNT	56

Total number of pages: 56

Remarks:

Order of re-scan issued on .....